

Process for making an alkali stable, abrasion resistant coating and a lacquer which may be used in this process.

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Abstract

There is described a process for making a coating composition based on hydrolysable silanes, which is characterised in that one or more hydrolysable compounds of the general formula (I) >SiR₄ (1) where the radicals R have been selected from hydrolysable groups, hydroxyl groups and non-hydrolysable groups, at least some of the non-hydrolysable groups present having at least one amino group and the molar ratio of hydrolysable groups present to amino-containing radicals present being within the range from 5:1 to 1:1, are reacted with water, selecting a molar ratio of water to hydrolysable groups present in the range from 1:1 to 0.4:1 and in that, before, during or after the addition of water, at least one compound having at least two epoxy groups in the molecule is added in such an amount that the molar ratio of epoxy groups to amino groups in the non-hydrolysable radicals of the compounds of the general formula (I) is within the range from 4:1 to 1:4. A coating composition obtainable by this process has in particular, excellent alkali stability and abrasion resistance and therefore is particularly suitable for coating ceramic materials, glass and metals.

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